

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 1-32, 34-39, 45, 46, 54-62, 64-67 and 72-86 as follows:

Listing of Claims:

1-32. (Cancelled)

33. (Original) A method of treating a patient suffering from thrombosis, the method comprising:

positioning a single ultrasound probe proximate a body surface of the patient, the single probe having a diagnostic mode and a therapeutic mode;

in the diagnostic mode, administering a diagnostic ultrasound from the single probe to the patient at a first frequency ; and

in the therapeutic mode, administering therapeutic ultrasound from the single probe to the patient at a second frequency to enhance a thrombolytic action of a thrombolytic agent.

34-39. (Cancelled)

40. (Original) The method of claim 33 wherein the single ultrasound probe comprises a plurality of transducer elements arranged in an array, the array defining an area.

41. (Original) The method of claim 40 wherein each of the transducer elements is triangular shaped, and the area is hexagonal shaped.

42. (Original) The method of claim 40 wherein each of the transducer elements is rectangular shaped, and the area is polygonal.

43. (Original) The method of claim 40 wherein the plurality of transducer elements comprises 128 transducer elements.

44. (Original) The method of claim 40 wherein administering ultrasound in the diagnostic and therapeutic modes is controlled by a computer.

45-46. (Cancelled)

47. (Original) A method of treating a patient suffering from thrombosis, the method comprising:

selecting a region on a body surface of the patient;

placing on the body surface a single ultrasound probe having a plurality of transducer elements arranged in an array, the array defining a plurality of areas within the region;

administering pulsed ultrasound from the ultrasound probe to a first one of the areas during a diagnostic mode and evaluating a window through that first area;

if the window through the first area is not an optimum window, administering the pulsed ultrasound to a second one of the areas in the diagnostic mode and evaluating a window through the second area, at least a portion of the second area including at least a portion of the first area;

repeating the administration of the pulsed ultrasound to another area in the diagnostic mode if prior areas administered with pulsed ultrasound do not substantially include the optimum window, until an area having substantially the optimum window is located; and

administering the ultrasound in the therapeutic mode from the single ultrasound probe through the area having substantially the optimum window.

48. (Original) The method of claim 47 wherein the ultrasound administered in the therapeutic mode comprises pulsed or continuous-wave ultrasound.

49. (Original) The method of claim 47 wherein each of the transducer elements is triangular shaped, and the area is hexagonal shaped.

50. (Original) The method of claim 47 wherein each of the transducer elements is rectangular shaped, and the area is polygonal shaped.

51. (Original) The method of claim 47 wherein administering the pulsed ultrasound in the diagnostic mode comprises administering the pulsed ultrasound at a frequency different from a frequency of the ultrasound administered in the therapeutic mode.

52. (Original) The method of claim 47 wherein the ultrasound in the therapeutic mode is administered simultaneously with the pulsed ultrasound of the diagnostic mode.

53. (Original) The method of claim 47 wherein administering the pulsed ultrasound in the diagnostic mode, repeating the administering, and administering ultrasound in the therapeutic mode are controlled by a computer.

54-62. (Cancelled)

63. (Original) An apparatus to treat a patient suffering from thrombosis, the apparatus comprising:

a single ultrasound probe structured to transmit pulsed ultrasound in a diagnostic mode, and ultrasound in a therapeutic mode, the ultrasound having a characteristic in the therapeutic mode that is different from a characteristic of the pulsed ultrasound in the diagnostic mode; and

a controller structured to switch the single ultrasound probe between the diagnostic and therapeutic modes and to process ultrasound Doppler signals returned by the single ultrasound probe during the diagnostic mode.

64-67. (Cancelled)

68. (Original) The apparatus of claim 63 wherein the single ultrasound probe comprises plurality of transducer elements arranged in an array, the array defining an area.

69. (Original) The apparatus of claim 68 wherein each of the transducer elements is triangular shaped, and the area is hexagonal shaped.

70. (Original) The apparatus of claim 68 wherein each of the transducer elements is rectangular shaped, and the area is polygonal.

71. (Original) The apparatus of claim 68 wherein the plurality of transducer elements comprises 128 transducer elements.

72-86. (Cancelled)